

## Claims

Claim 1-61 (cancelled).

Claim 62 (previously presented): A process for purifying reaction products comprising:

providing a reaction product mixture comprising HF,  $C_3Cl_3F_5$ , and  $C_3Cl_2F_6$ ;

phase separating the reaction product mixture into a top liquid phase comprising HF and a bottom liquid phase comprising the  $C_3Cl_3F_5$ , and  $C_3Cl_2F_6$ ; and

physically separating the top and bottom phases to form a solution comprising one or both of the  $C_3Cl_3F_5$ , and  $C_3Cl_2F_6$ .

Claim 63 (previously presented): The process of claim 62 wherein:

the mixture comprises HF,  $C_3Cl_4F_4$ ,  $C_3Cl_3F_5$ , and  $C_3Cl_2F_6$ ;

the bottom liquid phase comprises  $C_3Cl_4F_4$ ,  $C_3Cl_3F_5$ , and  $C_3Cl_2F_6$ ; and

the solution comprises one or more of  $C_3Cl_4F_4$ ,  $C_3Cl_3F_5$ , and  $C_3Cl_2F_6$ .

Claim 64 (previously presented): The process of claim 62 wherein the phase separating comprises altering the reaction product mixture temperature to a temperature of from about -30°C to about -10°C.

Claim 65 (original): The process of claim 64 wherein the temperature is about -20°C.

Claim 66 (previously presented): A process for separating chlorofluorinated compounds comprising:

providing a first solution comprising both first and second C-3 chlorofluorinated compounds, the first compound having at least six fluorine atoms and the second compound having less than six fluorine atoms;

preparing a mixture comprising the first solution and water;

phase separating the mixture into at least three phases; a gas phase comprising the first compound, an upper liquid phase comprising the water, and a lower liquid phase comprising the second compound; and

removing the gas phase from the upper and lower liquid phases to form a second solution comprising the first compound.

Claim 67 (previously presented): The process of claim 66 wherein the first compound comprises  $C_3F_6Cl_2$  and the second compound comprises  $C_3F_5Cl_3$ .

Claim 68 (previously presented): The process of claim 66 wherein the phase separating comprises altering the first solution reaction temperature to a temperature of from about 25°C to about 75°C.

Claim 69 (original): The process of claim 68 wherein the temperature is about 50°C.

Claim 70 (previously presented): The process of claim 66 wherein the mixture further comprises a basic compound.

Claim 71 (original): The process of claim 70 wherein the basic compound comprises KOH.

Claims 72-88 (cancelled).